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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,508	06/30/2003	David I. Poisner	42P16204	1159
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INTEL CORPORATION c/o INTELLEVATE, LLC P.O. BOX 52050 MINNEAPOLIS, MN 55402			EXAMINER NGUYEN, MINH DIEU T	
			ART UNIT 2137	PAPER NUMBER
			MAIL DATE 06/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication..

Office Action Summary

Application No.

10/609,508

Applicant(s)

POISNER, DAVID I.

Examiner

Minh Dieu Nguyen

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 21-31 is/are pending in the application.
- 4a) Of the above claim(s) 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 21-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the communication dated 12/29/2006 with the election of group I (claims 1-17 and 21-31) and the cancellation of claims 18-20.
2. Claims 1-17 and 21-31 are pending.

Claim Objections

3. Claims 2-3, 5, 7, 14-15, 17, 22-23 and 26 are objected to because of the following informalities:
 - a) As to claims 2-3, 14-15 and 22-23, "the encryption data" should be "the encrypted data".
 - b) As to claims 5 and 17, "the memory device" should be "memory device".
 - c) As to claims 7 and 26, "the data transmitted" should be "the encrypted data transmitted".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6, 9-10, 12-17, 21-25, 28-29 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Angelo et al. (5,748,888).

a) As to claims 1 and 13, Angelo discloses a computer system (see Angelo: Fig. 1, element S) comprising: a central processing unit (CPU) (see Angelo: Fig. 1, element 100); a chipset, coupled to the CPU, including: protected registers; and a host controller (i.e. the black box security device included in the PCI-ISA bridge (130) is coupled with the CPU, the black box comprises a command register and decoder for the security device, a data/status register for communicating with the computer, an eight byte register file to store a password for each of the protected resources, and password verification logic, see Angelo: col. 4, lines 8-25); a bus coupled to the host controller (see Angelo: col. 3, lines 56-59); and a peripheral device coupled to the bus (see Angelo: Fig. 1, elements 58, 60), wherein trusted software accesses the protected registers to transmit encrypted data between the host controller and the peripheral device upon startup of the computer system to verify that the peripheral device is trustworthy (see Angelo: col. 7, lines 35-47; col. 8, lines 18-28).

b) As to claims 2, 14 and 22, Angelo discloses the system of claim 1 wherein the encrypted data is generated at the peripheral device and transmitted to the host controller (see Angelo: col. 8, lines 18-28).

c) As to claims 3, 15 and 23, Angelo discloses the system of claim 1 wherein the encrypted data is generated at the CPU and transmitted to the peripheral device (see Angelo: col. 2, lines 12-16).

d) As to claims 4, 16 and 24, Angelo discloses the system of claim 1 wherein the trusted software writes to the protected register to indicate to the host controller the encrypted data to transmit and response data that is to be received (see Angelo: col. 2, lines 51- 67).

e) As to claims 5, 17 and 25, Angelo discloses the system of claim 1 wherein the chipset further comprises: a protected memory table; and a memory controller couple to memory device (see Angelo: col. 4, lines 16-22).

f) As to claim 6, Angelo discloses the system of claim 6 further comprising a memory device coupled to the memory controller (see Angelo: col. 4, lines 16-22).

g) As to claims 9 and 28, Angelo discloses the system of claim 1 wherein the peripheral device is a keyboard (see Angelo: col. 5, lines 12-14).

h) As to claims 10 and 29, Angelo discloses the system of claim 1 wherein the peripheral device is a mouse (see Angelo: col. 5, lines 9-12).

i) As to claims 12 and 31, Angelo discloses the system of claim 1 wherein the bus is a Universal Serial Bus (see Angelo: col. 10, lines 16-18).

j) As to claim 21, Angelo discloses a computer system (see Angelo: Fig. 1, element S) comprising: a central processing unit (CPU) (see Angelo: Fig. 1, element 100); a chipset, coupled to the CPU, including: protected registers; and a host controller (i.e. the black box security device included in the PCI-ISA bridge (130) is coupled with the CPU, the black box comprises a command register and decoder for the security device, a data/status register for communicating with the computer, an eight byte register file to store a password for each of the protected resources, and password

verification logic, see Angelo: col. 4, lines 8-25); a memory device coupled to the chipset (see Angelo: col. 4, lines 16-22); a bus coupled to the host controller (see Angelo: col. 3, lines 56-59); and a peripheral device coupled to the bus (see Angelo: Fig. 1, elements 58, 60), wherein trusted software accesses the protected registers to transmit encrypted data between the host controller and the peripheral device upon startup of the computer system to verify that the peripheral device is trustworthy (see Angelo: col. 7, lines 35-47; col. 8, lines 18-28).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Angelo et al. (5,748,888) in view of admitted prior art (APA) by the applicant.

Angelo discloses the system of claim 6, however he is silent on the capability of having the encrypted data transmitted between the host controller and the peripheral device bypasses a stack at the memory device associated with the peripheral device.

The applicant admitted in the specification that the encrypted data transmitted between the host controller and the peripheral device bypasses a stack at the memory device associated with the peripheral device (i.e. the data transmitted to or received from the USB peripheral is encrypted to thwart malicious USB software, however the

USB stack cannot be trusted with transmitting encryption keys to the peripheral, so one mechanism includes bypassing the USB stack by transmitting encryption keys directly to a keyboard peripheral, see applicant's specification: 0005-0006).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of the encrypted data transmitted between the host controller and the peripheral device bypasses a stack at the memory device associated with the peripheral device in the system of Angelo, as applicant's specification discloses so as to securely protect transmitted data.

8. Claims 8 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Angelo et al. (5,748,888) in view of admitted prior art (APA) by the applicant and further in view of Challener et al. (2002/0073342).

The combination of Angelo and APA discloses the system of claim 7, wherein the memory device comprises a protected memory table (see Angelo: col. 4, lines 1-7), however it is silent on the capability of the memory device comprising a trusted software monitor. Challener is relied on for the teaching of the memory device comprising a trusted software monitor (see Challener: 0030). It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of having the memory device comprising a trusted software monitor in the system of Angelo and APA so as to neutralize unauthorized access to a user input interface in a data processing system (see Challener: 0003).

9. Claims 11 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Angelo et al. (5,748,888) in view of Challener et al. (2002/0073342).

Angelo discloses the system of claim 1, however he is silent on the capability of having the peripheral device is a scanner. Challener is relied on for the teaching of having the peripheral device is a scanner (see Challener: 0007). It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of having the peripheral device is a scanner in the system of Angelo, as Challener teaches so as to provide different capability for personal computer peripherals (see Challener: 0007).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 571-272-3873.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Nguyen Minh".

mdn

6/7/07